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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/260,160

06/15/94

UNGCHUSRI

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C5M1/0802

EXAMINER

SHACKELFORD, H

FMC CORPORATION  
PATENT DEPARTMENT  
200 E RANDOLPH DRIVE  
CHICAGO IL 60601

ART UNIT

PAPER NUMBER

3501

DATE MAILED:

08/02/96

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

A shortened statutory period for response to this action is set to expire three months(s), or thirty days, whichever is longer, from the date of this communication.

# Office Action Summary

Application No.  
**08/260,160**

Applicant(s)  
**UNGCHUSRI ET AL.**

Examiner  
**H. Shackelford**

Group Art Unit  
**3501**



☒ Responsive to communication(s) filed on May 6, 1996

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-5 and 12-20 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-5 and 12-20 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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1. Claims 1-5, 12 and 13 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In the discussion with Mr. Query on 7-30-96, the 112 rejection was discussed wherein in claims 1 and 13 the phrase "generally constant" is to be delete due to the confusion of the "constant radius" and "each groove is greater than the radius of each adjacent outer groove." The 112 rejection will be withdrawn once the claims reflect this change.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 12, and 18-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by Himes. Himes discloses bearings supports 38 and 39 having a male connector having a central axis, an inner end (the smaller diameter end), a plurality of annular grooves having an arcuate cross-section, each groove having the same radius and wherein each outer groove has a greater radius than the adjacent outer groove closer to the first end, a female connector having grooves which correspond to the grooves of the

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male connector and having a shoulder at the smaller diameter end of the male connector and a plurality of ball bearings in each race. The radius of each inner groove is greater than the radius of each adjacent inner groove closer to one of the outer grooves. All of the arcuate grooves have a straight line segment at the apex.

4. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

5. Claims 19 and 20 are rejected under 35 U.S.C. § 103 as being unpatentable over Waters in view of Phillips or Ashton or SW '402.

Waters discloses the invention substantially as claimed. However, the bearing member is not a plurality of ball bearings in grooves as claimed.

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Phillips and Ashton both teach the use of using a plurality of ball bearing as claimed, in a pipe swivel joint.

SW '402 teaches of different types of bearing elements. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the plurality of ball bearings as seen in Phillips or Ashton or SW '402 to the swivel joint by Waters since both types of bearing elements are readily used in this area of endeavor, as evidenced by the prior art. And, SW '402 teaches the equivalence of all different types of bearing elements.

It should be noted that the first end has not been structurally defined.

6. Claims 3-5, 14-17 would be allowable if rewritten to overcome the rejection under 35 U.S.C. 112 and to include all of the limitations of the base claim and any intervening claims.

7. Claim 13 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. 112.

8. Applicant's arguments have been fully considered and the examiner's comments are as follows. It is argued that there is no indication to permit rotation between members A and B of Waters. It is pointed out that Waters discloses "a swivel-joint

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whereby the members may be completely rotated relative to each other" (see col. 1, lines 13-15). The applicant's arguments directed to Rohn are moot in view of the present rejection.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hoffman 5,118,205 discloses a bearing assembly having a similar "stepped" configuration.


10. Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to H. Shackelford whose telephone number is (703) 308-2978.

hcs  
July 30, 1996

US  
7/30/96

  
DAVE W. AROLA  
PRIMARY EXAMINER  
ART UNIT 351